

Grade 6 - Writing and Reading Algebraic Expressions - Test Answer Key

Common Core 6.EE.A.2a, 6.EE.A.2b · maths-pdf.fr/en/

Use this key to score the algebraic expressions test out of 20 points. Each solution is fully worked, and the scoring line explains how to award each point and partial credit.

Grade 6 · Common Core State Standards: **6.EE.A.2a, 6.EE.A.2b**

Question 1 - Write expressions [2 pts]

(a) $9+n$. (b) $\frac{x}{6}$.

Scoring: 1 point for each expression.

Question 2 - Write expressions with less than [2 pts]

(a) $p-12$. (b) $3(w-4)$.

Scoring: 1 point for each expression; subtracting in the wrong order earns no point.

Question 3 - Parts of an expression [2 pts]

Terms: $6y$ and 9 . Coefficient: 6 . Constant: 9 .

Part	Name
$6y$	term
6	coefficient
9	constant

Parts of $6y + 9$.

Scoring: 1 point for the terms; 1 point for coefficient and constant.

Question 4 - Read an expression [2 pts]

The product of 4 and the sum of n and 7.

Factors: 4 and $(n+7)$.

Scoring: 1 point for the words; 1 point for the factors.

Question 5 - Story to expression [2 pts]

$m-8$. For $m=25$: $25-8=17$.

Money	25	
Left	17	8

Mei has 17 dollars left.

Scoring: 1 point for the expression; 1 point for \$17.

Question 6 - Groups [2 pts]

Pencils in boxes: $12b$.

Plus 5 loose: $12b+5$.

Scoring: 1 point for each expression.

Question 7 - Two variables [2 pts]

$4p+3d$.

$4 \times 2 + 3 \times 5 = 8 + 15 = 23$.

Scoring: 1 point for the expression; 1 point for \$23.

Question 8 - Compare expressions [3 pts]

$2n+5$ is the sum of the product $2n$ and 5. $2(n+5)$ is the product of 2 and the sum $n+5$.

For $n=3$: $2 \times 3 + 5 = 11$ and $2(3+5) = 16$.

Scoring: 1 point for each description; 1 point for both values.

Question 9 - Build an expression [3 pts]

$$15m + 20.$$

For 6 months: $15 \times 6 + 20 = 90 + 20 = 110$.

$15m$ is the monthly cost; 20 is the one-time fee.

Months	1	6	m
Cost	\$35	\$110	$15m + 20$

Gym cost.

Scoring: 1 point for the expression; 1 point for \$110; 1 point for the meaning of each part.

Total**20 points**